Lumetra
Healthcare Solutions
An IPRO Affiliate

California Emergency Medical Services Authority HIE Readiness Assessment

Presented by
Kimbelee Snyder, Vice President
Lumetra Healthcare Solutions

About Lumetra

- Non-profit health care consulting organization founded in 1983, based in San Francisco, CA
- Local Extension Center for Greater San Francisco Bay Area serving over 1000 Providers implementing EHR's and attesting to meaningful use
- Served as the California Medicare Quality Improvement Organization (QIO) until 2008
- CMS designated QIO-like organization
- URAC accredited Independent Review Organization (IRO)
- In 2011, Lumetra established an affiliation agreement with IPRO

Lumetra
Healthcare Solutions
An IPRO Affiliate

Lumetra Core Services

- **Healthcare Informatics**: *Physician Assistance and Support Services* including: Electronic health record (EHR) optimization services, health information technology (HIT) solutions, health care transformation services
- **Clinical Review**: Independent peer review, case-based quality improvement, program monitoring and improvement
- **Data Analytics**: Data analysis and validation, compliance auditing, performance monitoring and surveillance

Lumetra Healthcare Solutions
An IPRO Affiliate

About IPRO

- Over 25 years in business as an independent, not-for-profit 501(c)(3) working to improve the quality and value of healthcare services
- Over 400 full-time staff and 375 physician consultants
- Headquartered in Lake Success, NY with offices in San Francisco, CA; Harrisburg, PA; Trenton, NJ and Albany, NY
- Currently supporting over 50 Federal, State, and local government healthcare programs
- Clients in more than 33 states – 20 IRO and 8 EQRO Contracts

The Landscape

Lumetra
Healthcare Solutions
An IPRO Affiliate

Background

- The Emergency Medical Services Authority (EMSA) wants to understand the health information exchange (HIE) landscape throughout California
  - HIE Defined by the U.S. Department of Health and Human Services

"the electronic movement of health-related information among organizations according to nationally recognized standards…"

- Explore readiness among 33 Local Agencies, Emergency Medical Services providers and California Hospitals

Lumetra Healthcare Solutions
An IPRO Affiliate

Scope

- Conduct a stateside HIE readiness assessment and gap analysis for EMS
  - Assess readiness of agencies
  - Current status of HIE
  - ePCR implementation
  - Data transmission to hospitals
  - Integration of ePCR into hospital health record
  - Bidirectional HIE exchange from field to hospital
- Identify best practices for HIE
- Identification of key barriers, gaps and cost considerations

Lumetra Healthcare Solutions
An IPRO Affiliate

Project Approach: Timeline

Task	# of Days	End Date
Readiness Assessment and Gap Analysis	41 days	10/28/2013
Best Practices	10 days	11/8/2013
Key Barriers, Gaps and Cost Considerations	14 days	11/8/2013
Draft Report	18 days	11/20/2013
Final Report	10 days	12/16/2013

Lumetra Healthcare Solutions
An IPRO Affiliate

Survey Design

California EMS ePCR and HIE Adoption Model	
Stage	**Cumulative Capabilities**
Stage 7	HIE functional, bidirectional sharing of data between the ePCR and hospital based EHR, business and clinical intelligence.
Stage 6	HIE capable, Transfer of data from the ePCR to hospital based EHR
Stage 5	HIE capable, Advanced clinical decision support (on-line medical direction) through hospital Dashboard, proactive care management, structured messaging.
Stage 4	ePCR transmission to Hospital Dashboard, including EKG, available at the hospital, receiving unidirectional information from the field “real-time”.
Stage 3	ePCR entry, computers have replaced the paper chart for “real-time” data entry, clinical documentation and clinical decision support (pre-hospital protocols).
Stage 2	Beginning of a computerized data record (CDR), computers may be at point-of-care.
Stage 1	Desktop access to PCR information entered after the call, multiple data sources.
Stage 0	Paper chart based

Survey Design

Baseline Assessment

- 7 Levels of HIE
- Use of CEMSIS (California EMS Information System)
- Type of information needing or currently transmitting
- Systems in place
- Interfaces in place
- Compatibility with other EMS providers

Lumetra Healthcare Solutions
An IPRO Affiliate

Survey Design

Use Case

- Review of high level process for intake; starting with 911 call and ending at hospital
- Software and Equipment
- Patient health information transmission
- How is transmission completed

Lumetra Healthcare Solutions
An IPRO Affiliate

Survey Design

ePCR Progress

- Is ePCR implemented; in progress; not at this time
- Budget planned or spent
- % of responses covered or planned for ePCR
- Number of Providers using ePCR if implemented

Lumetra Healthcare Solutions
An IPRO Affiliate

Survey Design

Integration of ePCR

- Is ePCR integrated with hospital
- Type of data currently integrated or planned for

Bidirectional HIE Exchange

- Is there bidirectional exchange
- What type of data is
- What is process (program, manual)
- How is patient identifier mapped

Lumetra Healthcare Solutions
An IPRO Affiliate

Survey Design

Best Practices

- Productivity
- Accuracy
- Improved outcomes
- Experience
  - Positive
  - Negative

Lumetra Healthcare Solutions
An IPRO Affiliate

Survey Design

Cost Considerations

- Cost of ePCR
- Cost of implementation
- Cost of maintaining

Lumetra Healthcare Solutions
An IPRO Affiliate

Survey Design

Barriers and Gaps

- Training
- Change Management
- Funding
- Timeframe
- Other

Lumetra Healthcare Solutions
An IPRO Affiliate

Survey Implementation

- Thirty–three Agencies
  - Many sub agencies
- California EMS ePCR and HIE Adoption Model sent in advance
- Each survey conducted by telephone
- Complete cooperation; all anxious to participate

Lumetra Healthcare Solutions
An IPRO Affiliate

Final Report

Findings

- EMS data systems compatibility and gaps
- ePCR implementation progress
- Current data transmission to hospitals
- Integration of ePCR data to hospital EHR
- Bidirectional HIE exchange

Lumetra Healthcare Solutions
An IPRO Affiliate

Final Report

Findings (con't)

- Best Practices
- Barriers
- Gaps
- Cost considerations
- Conclusion and recommendations

Lumetra Healthcare Solutions
An IPRO Affiliate

Thank You !

Questions

Contact: Kim Snyder, Vice President
ksnyder@lumetrasolutions.com
415-677-2162

Lumetra Healthcare Solutions
An IPRO Affiliate